

REMARKS/ARGUMENTS

Reconsideration of this application is requested. Claims 1-7 and 9-19 will be pending in the application subsequent to entry of this Amendment.

As a preliminary matter, counsel notes the examiner has not acknowledged receipt of a certified copy of the underlying Japanese priority application received in this national stage application from the International Bureau. The Notification of Missing Requirements mailed April 1, 2005 in the subject application indicates receipt of "Priority Documents filed on 09/28/2004" among other documents received by the U.S. PTO at that time.

The sole issue raised in the outstanding Official Action is a single prior art-based rejection of all of the originally filed claims over two documents applied in the alternative. The Examiner cites EP 0 587 139 and JP 06-206376 and points out that these patents teach thermal recording materials having a protective layer over a thermal recording layer and that since the protective layers employ the same materials (i.e., a pigment and core/shell type water dispersible resin), it is "inherent" that these protective layers have the same transfer amounts of water and contact angles as those defined in the original claim 1. On this basis, the Examiner asserts that claims 1 to 17 (as filed) are unpatentable under 35 USC 103(a).

All of the essential requirements of claim 8 are now incorporated into claim 1, that is, a requirement that the protective layer is at least one member of a water-dispersible resin and a non-modified polyvinyl alcohol and a requirement that the protective layer has a pigment content of 40 mass% to 70 mass%.

The cited EP 0 587 139 does not disclose that its protective layer contains a pigment, and in the cited JP 06-206376, the content of a pigment in the protective layer disclosed in Example 1 thereof is merely

$$\frac{2 \times 100}{100 \times 0.2 + 2 + 2 \times 0.2 + 2 \times 0.2} = 8.7 \text{ mass\%},$$

and similarly, the content of a pigment in any one of Examples 2 to 9 thereof is merely approximately 10 mass% or less. Applicant submits that the above difference in the pigment content renders the above amended claims clearly distinguishable from the inventions of the cited references.

A new independent claim (Claim 18) is added in which the resin in the protective layer in claim 1 (before the above amendment) is a silicon-modified polyvinyl alcohol.

Since neither EP 0 587 139 nor JP 06-206376 disclose that their protective layers contain a silicon-modified polyvinyl alcohol, the above limitation to a silicon-modified polyvinyl alcohol renders the present invention clearly distinguishable from the inventions of these cited references.

New claim 19 dependent upon the new claim 18 has been added, in which the protective layer has a pigment content of 10 to 50 mass%. This limitation is supported in the specification, page 21, section [0028].


In the invention of the above amended claim 1 and the invention of the above newly added claim 18, since the protective layer contains the specified resin and has the specified pigment content, there can be obtained the specifically claimed features that the transfer amount of water on the surface of the protective layer for a contact time period of 150 ms, measured by a Bristow method, is 3 ml/m² to 15 ml/m² and that the contact angle between the surface of the protective layer and water is 60° to 100°. Since neither of these properties are disclosed in either of the cited EP 0 587 139 or JP 06-206376, applicants' claims as presented above are not suggested by either of these references.

For the above reasons it is respectfully submitted that the claims of this application define inventive subject matter. Reconsideration and allowance are solicited. Should the examiner require further information, please contact the undersigned.

Respectfully submitted,

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